FROM CHITTENANGO SPRINGS.

Correspondence of the N. Y. Tribune.

CHITTENANGO SPRINGS, N. Y., Aug. 12.

I have not forgotten my promise; but really it is so comfortable to sit here in the rocking chair, in our good hotel, or hunt and fish in the brooks and lakes around, with our country cousins, worth ten times more than our city ones, and read the morning TRIBUNE every evening, that I scarcely can think of writing. But a brief passage from my journal must suffice.

There are two fine sulphur springs; the water is cool and not unpleasant to the taste. A hotel, with excellent accommodations, and several private summer houses for families, render the place comfortable. The situation is in a beautiful valley, with hills, covered to the top with hunting groves and a splendid trout steam running by our very door. Our friend, Gerrit Smith, came over last week and took seventy-six splendid fellows from the stream. He understands trout nature better than he does human nature. For this very town and county, which rolled up splendid majorities for him for Congress, now will hardly deposit one vote for him for Governor. I have not seen one man that expects to give him his vote. And yet, strange as it may seem, he has the universal esteem of the people for his noble impulses, his generous sympathies for human rights. Pardon this digression—I was going to tell you that the hotel at the Springs is full; and as pleasant a company as Saratoga, Long Branch or Newport can boast, is here for the season.

THE TRIBUNE, I find, is the favorite paper here. Its readers are among the most substantial citizens of the place.

The Atlantic cable triumph has made even Chittenango wild with delight. It has been decided by general consent to unite with all the rest of the world in celebrating this great event in Time's history, in a becoming manner. We are getting out the big gun; the firemen are trimming up their torches for a flaming procession, and our orators are to be brought up to the magnetic point of eloquence. Just the moment we get the word from you—"All ready"—the bells will ring and the people will unite in the general demonstration of joy which ought to gladden the hearts of all men.

B.

PEARL FISHING IN KANSAS.

Correspondence of The N. Y. Tribune.

TOPEKA, K. T., Aug. 4, 1858.

There has been quite an excitement here of late in consequence of the recent discovery of pearls in the south western part of this Territory. The circumstances leading to the discovery were as follows: A company consisting of Mr. Ferry, myself and others from this place, went to Towanda (a newly located town situated on the Whitewater, about 120 miles southwest from here,) for the purpose of erecting some new buildings. While there we received a visit from a gentleman, formerly from New-Jersey, who stated that the muscle shells found in the Whitewater bore a striking resemblance to those found in New Jersey containing pearls. This led to an examination.

A hundred shells were soon opened, which yielded eight beautiful pearls. The result of the investigation being announced, the Towandaans immediately suspended business in town and directed their attention to pearl-hunting.

A company of nine men secured in two weeks, three thousand seven hundred and fifty pearls, varying in size from a small pin-head to that of a large pea.

The sand in which the muscles are imbedded is peculiarly clear and brilliant. The stream is a tributary of the Arkansas and is being searched from source to mouth. The largest numbers have been found at Towanda, which is 60 miles from the junction.

A large company are preparing to leave this place and engage in the new business, which opens another source of wealth to Kansas.

T. C. MILLS.

P. S.—I inclose a few of the smallest pearls as a sample of the quality.

T. C. M.

PENNSYLVANIA STATE TEACHERS' ASSOCIATION.

THIRD DAY.

Correspondence of The N. Y. Tribune.

SCRANTON, Pa., Aug. 12, 1858.

The Hall is well filled this morning, notwithstanding the wet weather. An effort was made to introduce again for discussion the power of County Superintendents to annul certificates, in which, from local causes, many teachers present feel very strongly, but was cut off by a motion to lay on the table. The most important work of the morning was a series of resolutions in favor of Mr. Morrill's bill for granting public lands to State Agricultural Universities, and the appointment of a Committee to memorialize Congress in its favor. Much enthusiasm was manifested on this subject. An hour was occupied by details of business, and then addresses were offered by Mr. C. T. Lewis of Chester and Mr. Dean of Delaware, on the call of the meeting.

At the invitation of the Board of Directors of the neighboring village of Hyde Park, the Association held its afternoon session in their new school building as its dedication. Hyde Park is on the opposite bank of the romantic little river Lackawanna, and on very high ground, overlooking all the beautiful valley in which Scranton lies. A view of rare beauty presents itself at each window of this handsome school-house. The building was crowded in every part, and the Directors had made no provision for accommodating representatives of the press; so that I became impatient of heat, crowding and tedious waiting, and left the premises for the shady grove that fringes the Lackawanna, to recruit energy for the evening session. The extreme heat, which has been more oppressive this week than in any previous part of the season, has taken much from the vigor and interest of the meeting.

In the evening, Mr. Wynkoop of the "People's College" in Havana, N. Y., was introduced, and gave some account of that institution and its history, which, however, is already familiar to the readers of THE TRIBUNE. The corner-stone of the principal building is to be laid on the 2d of next month, and a general invitation was extended to those present to attend. Several pleasant and brief addresses followed, much after the style of College "indignation meetings." Amusing anecdotes and hearty expressions of feeling filled the time, with occasional intervals for the sweet music of the High-School choir. A lady from Wayne County read an essay at a late hour on "The Sunny "Side of Teacher's Life." It was rather in boarding-school style, full of common place, but was so well read as to be received with much favor. L. W. Moodie, Commissioner of Broome County, N. Y., then appeared in behalf of the delegation from the New-York State Association. He showed the superiority of the Pennsylvania system over that of New-York in respect to local officers. H. C. Hickok, State Superintendent, explained eloquently some of the most efficient features of this system. He is a speaker of great force and large resources, as well as an excellent administrator of the laws. To him more than any other man is the rapid growth of educational spirit in this State due.

This evening's meeting was the most genial and useful of the session. As a whole, the meeting has been a success; but the Association is behind that of New-York in numbers and intelligence.

REPUBLICAN CONVENTIONS IN ERIE COUNTY.

Correspondence of The N. Y. Tribune.

BUFFALO, Aug. 14, 1858.

The 1st and IId Assembly District Conventions for this county have this day held their Conventions for the purpose of sending Delegates to the State Convention, to be held at Syracuse on the 8th of next month. The 1st District elected the Hon. E. G. SPAULDING and JOSEPH STRINGHAM as Delegates; alternates, H. P. THAYER and P. H. BENDER. The IId District elected the Hon. BENJ. WELCH, jr., and JOHN L. TALCOTT, esq., Delegates; alternates, F. P. STEVENS and J. G. HOYT. These men are all of them true and reliable Republicans, and have been selected by their Conventions *(unanimously)* for their known opposition alike to secret cliques and corrupt politicians.

F.

HOW THEY ACT IN ST. PAUL.—The members of the Minnesota Legislature indulge in the delightful practice of smoking during the business hours of the Legislature, and *The St. Paul Times* pronounces it undignified and unbecoming, and thinks there was a resolution passed at a prior session in which the language used pronounces the practice ungentlemanly.

MEXICO.

By the Havana steamer of the 9th inst. we have received news from the City of Mexico to July 24, and from Vera Cruz to the 27th.

On the 10th of July a new Government was proclaimed in the City of Mexico, composed of the following:

Minister of Foreign Relations	CASTILLO LANZAS.
Minister of Government	FERNANDEZ DE JAUREGUI.
Minister of Justice	PADRE MIRANDA.
Minister of the Interior	JARRIN.
Minister of Public Safety	ZALDEVAR.
Minister of War	DON JOSE GARCIA.

The *Prensa de la Habana* says that on the 14th of July the new Ministry passed a law against conspirators, mentioning those who should be considered as such, and defining the punishment, which will be from five to ten years' imprisonment and banishment, according to the culpability of the convicted party. A decree was also passed, in which it is declared that the large number of arms in the hands of all classes of persons is a great detriment to the public welfare. Another law enjoins the establishment and organization of defensive operations in town and country, and recommends proprietors and others to give their aid for their own and the common good.

According to a letter, dated from the capital on the 11th of July, and inserted in the *Progreso* of Vera Cruz, it appears that the troops of Echeagaray, Galindo and Parra are assembled there in the fear that an advance would be made on the capital.

On the 30th of June the forces of Col. Zuazua took possession of the important town of San Luis Potosi. Generals Miramon, Mejia, Marquey and Parra have been directed to march against it.

Immediately after the taking of San Luis Potosi, Col. Zuazua issued a decree banishing the Bishop of that diocese and thirty priests. The complaint against these clergymen seems to be that they, during the action of San Luis, were very active, under the lead of their Bishop, Barajas, in encouraging the reactionist forces in the city to resist the entrance of Zuazua's troops, taking the field in person and distributing "sanctified" medals to the soldiery—thus pretending to make God bless their blows, and, in case they fell, giving them a passport to heaven.

On the 15th Gen. Alatriste took Tuspan, capturing numerous arms, including two cannon, and making the garrison prisoners.

It is said that on the 2d, in the Pass of Atenquique, a battle was fought between the troops of Miramon and those of Don Santos Degollado. The former say that, after six hours' fighting, the enemy left on the field of battle 122 dead and many more wounded, with a quantity of baggage and ammunition. The *Progreso*, on the other hand, says that this pretended victory was a most disastrous rout, that Miramon left more than 200 dead on the field, that 1,000 of his men were wounded, and that the remainder of his army, disorganized and dispersed, fled toward Guadalajara.

Gen. Parra, ex-Minister of War, had been appointed Commander-General of the Department of Guanajuato, and of a new division of the Army called the Center, composed of the forces of that State and those of Michoacan, Queretaro and Jalisco, combined with the division of the North, under the command of Gen. Miramon.

The Governor of Vera Cruz had received official information that the forces of Echeagaray, which were to sail from Jalapa, in the neighborhood of Perote, for the coast of Barlovento, were detained at the Pass called "Maria de la Torre," and lost there forty men; that their infantry and artillery were compelled to fall back upon "Paso de Novillos," and their cavalry upon Plapacoyan, where they were surrounded by a large body of Constitutionalists, composed of the National Guard of the Cantons of Misantla and Papantla, and about 200 veterans belonging to the garrison of the fortress of Perote.

The Brownsville (Texas) *Flag* of July 28 also contains some items of interest, although not so recent as the above.

The Monterey Official Bulletin of July 19 states that Gen. Moreno had abandoned the important point of Tampico and fled to the mountains, leaving the town in charge of only fifty men. Gen. Carvajal, with a large detachment of the forces of Tamaulipas, was to have marched on Tampico, while others pursued the retreating Gen. Moreno. Gov. Garza had left Matamoros to superintend in person the movements of the Tamaulipas forces. The battery and ammunition which left here for Monterey was expected to arrive in time for Gen. Vidaurri to take the field in person on the 27th of this month, which he announces as his intention to do, at the head of the main body of the army of the North, so soon as these needed supplies shall have arrived at Monterey. Every step of the brave frontiersmen has been marked with a signal triumph thus far, and but little doubt is now entertained of their ultimate and speedy success.

Durango had fallen into the hands of the forces under the Governor of Chihuahua, who had declared for the Constitution of 1857. Guanajuato, Guadalajara and Zacatecas had also fallen into the hands of the Liberals, while the news of the abandonment of the City of Mexico, by the pretender Zuloaga had been confirmed.

A letter from Monterey, dated July 29, gives the following account of an alleged murder of an American physician, and subsequent robbery and forgery, in the State of San Luis, Mexico:

"Dr. S. A. Butterfield, an American citizen from Dansville, Illinois (and whose father is Jeremiah Butterfield, Venice, Ross Post-Office, Hamilton County, Ohio, according to an entry found in a memorandum book of J. M. Beber), died at Cedral, State of San Luis, about the 9th of June. The supposition is that the J. M. Beber above named, administered poison to said Dr. Butterfield, as he attended him as a medical man, and immediately on the death of Butterfield, took possession of all his money, bills and papers, decamping from Cedral before the authorities were aware of the death. This Beber arrived here on the 13th, and forging Butterfield's name to a deposit receipt for $2 080, obtained that amount from a merchant here to whom it was consigned for account of Butterfield. On obtaining possession of the money, his first move was to employ persons to buy up gold for him, regardless of price—paying as high as $20 for Mexican ounces, the real value being $16. In the mean time an *exorto* came on for Beber, from Cedral, and he is in prison here. So far we have established against him forgery and robbery, and only wait the result of a post mortem at Cedral to establish—if such be the fact—the additional crime of murder. We have so far recovered of Beber, for the heirs of the unfortunate Dr. Butterfield, $564 in gold, and two houses in Salinas, which Beber had bought, paying a deposit of $480, in all $1,044. In addition there are some animals viz: two horses and a mule, for which the Government will pay, and a large case of surgical and dental instruments."

A SUPERIOR RAILROAD BRIDGE.

THE NORTHERN CENTRAL CROSSING OF THE SUSQUEHANNA.

A creditable work has been done by the Northern Central Railway Company, in the construction of a railroad bridge across the Susquehanna River at Dauphin, nine miles above Harrisburg. The bridge was opened for traffic on the 31st March last. We have the following interesting particulars of the character, dimensions, and mode of its construction, which would indicate that it is one of the most superior and extensive structures of its kind and class in the country:

"The total length of the bridge is 3,844 feet, divided into nineteen spans—seventeen spans of 210½ feet each, one of 112½ feet, and one of 153 feet. The hight of the truss is 30½ feet; width of bridge from out to out, 21½ feet. Total quantity of timber, 2,321,804 feet board measure; of which 1,801,720 feet are white pine, and 520,084 white oak; the total number of pieces of timber in the structure is 23,351; total lineal feet of timber, 316,204, equal to about sixty miles in length. Total quantity of iron is 356,164 lb, of which 211,272 lb are wrought and 144,892 lb are cast iron; total number of pieces of iron is 91,837, of which 30,796 are wrought iron and 61,041 cast iron. The lineal feet of wrought iron rods and bolts are 86,786, equal to sixteen and a half miles.

"The bridge is after the plan of "McCallum's inflexible arched truss." The track runs nine feet above the lower chord. The structure was commenced on the 28th day of March, 1857, and was completed on the 31st day of March, 1858, having been but 370 days, or 320 working days, in process of construction. It stands on massive piers of masonry, directly over the falls in the Susquehanna, which rendered the process of raising one of unusual difficulty and hazard, especially as a large portion of the raising was done in Winter. The contract was executed by McCallum, Seymour & Hawley, bridge builders, New-York, the work proceeding under the auspices of A. B. Warford, Chief Engineer of the Company, and P. P. Dickinson, engineer in charge, under whose more immediate supervision the work was done. From the beginning the work was conducted with energy and skill by all parties engaged, and considering the season of the year through which it was driven, it has been attended with a fair share of good fortune.

"This bridge illustrates the advantage resulting to railroad companies from the adoption of the most approved form of structures on their roads. On other lengthy railroad bridges, built of timber, the trains are compelled generally to run at the slowest rate of speed, and men are often to be seen upon them engaged in the business of adjustment or repair, whereas in the case of the McCallum bridge at Dauphin, the structure is not noticed in the time-tables, and trains dash over it at undiminished speed without danger or damage to the structure.

"Within the past two months there have been three cases, which now occur to our recollection, where insufficient bridges have broken down and precipitated the trains into the gulf below. It is believed that large numbers of the bridges now in use are of doubtful capacity; indeed, it is known that many are aided by false work and other adventurous contrivances, which infer the weakness of the structure. Under such circumstances the public are likely to become a little nervous, and demand of railroad companies the adoption of structures absolutely safe. Such a course by the companies would undoubtedly conform to true economy. Such is the risk to property and life arising from deficient bridges, that it is difficult to suppose that any company should venture to build a poor bridge with a view of saving money."

[Baltimore Sun.

THE VICTORIA BRIDGE.

From The Montreal Transcript, Aug. 11.

The work for the construction of this noble edifice is now rapidly proceeding, and we had an opportunity a few days ago of examining not only the completed parts of the structure, but also the operations which are taking place on the dams and piers which are not yet finished. We first proceeded over the abutment on the north shore to the tubes which are already placed across the two first spans of the bridge. The work of the riviting of the plates was going on, and the structure rang with the clangor of hammers forming the heads of the bolts. A large number of portable forges were stationed in all parts of the tube, and on the top of it, and rivets heated in the fires were supplied to the workmen by boys attending on each forge. It is interesting to see the speed with which iron—a material hardly known a few years ago in the arts of construction—can be formed into edifices adapted to the purposes of man. This speed is much facilitated by the circumstance that all the parts of the tubes are multiplications of the same patterns. The bridge will consist of twenty-four piers, with twenty-five openings or spans—the center about half as large again as the others. These openings are covered by a tube, or rather by a series of tubes of boiler plate, separated from each other at the ends, and strengthened by angle iron. An article like this is not the place for an account of the reasons which make the tubular form of materials stronger than any other arrangement of them; but we may remark that if the four plates which form the four sides of the tube were laid one upon another, the thickness of the whole would not exceed about two and a half inches, and would not support a fiftieth part of the load which may be safely carried over the tubes. It needs no engineering nor mechanical knowledge to be able to understand that hardly any accumulated thicknesses of such a material laid in a flat shape over an opening between 200 feet and 300 feet wide, would support the hundreds of tons weight made up by the component parts of a railway train resting on the middle of it.

The plates throughout the tubes are double; bolted to angle iron beams and girders; and always overlapping each other at the ends. For further security, each joint has placed over it, on each side of the plates, an extra sheet bolted on both sides of the joint, and called a covering plate. The object of all these precautions is to make the tubes resemble as much as possible similar tubes made of one piece of metal.

Many very delicate considerations have to be attended to by the engineer who adopts this tubular mode of construction, in order to give his roadway the greatest strength, with the least weight and cost. The condition upon which the attainments of this end depends is, that the relative strain upon each inch of the surface should be known, and the strength of the metal at that place proportioned to the stress. It is impossible here to give any idea of the data upon which these calculations are made. The result, however, is that the hardest duty must be done by the metal situated at the ends of the tubes and accordingly this part is strengthened by a considerable addition to the ordinary number of transverse supports of angle iron. As to the plates themselves, the same kind of calculations have determined that those in the bottom and top of the tube should be thinnest at the end and thickest in the middle of the length, while this order is reversed at the sides, and the greatest thickness of plate is used at the ends. The sentences immediately foregoing will prepare the reader for the information that every sheet of iron, and every angle iron upright or girder has its place in the edifice marked with the greatest accuracy before it is shipped at Liverpool, and that, upon arriving on the bank of the St. Lawrence, it must not vary half an inch from the position for which it was destined. But, perhaps, it will excite wonder at the immense forethought, labor and attention to details, which are necessary for such perfect and long-before-hand adjustment, when we state that it is necessary to determine the position of 2,500 different pieces of iron in each of the smaller tubes, or of 62,700 pieces in the whole bridge. This is like numbering the bricks of a house, and never putting one in the wrong place. The rivets used in each tube amount in number to 80,000, or to more than 2,000,000 in the entire structure, and, reckoning the heads as separate pieces of iron, we shall have more than 7,000,000 of distinct pieces of metal put together to form the tubular roadway.

The expansion and contraction of metal is another circumstance requiring the attention of the architect in iron. Every one is of course aware of this phenomenon, but perhaps it may be a novel reflection to many that the vast structure, poised so high in the air above the St. Lawrence, and apparently so firmly fixed, is yet going through constant and not inconsiderable charges of dimensions and even of forms, and that instead of its parts being rigidly fastened to their places, the metallic roadway is in fact disengaged from the stone piers in order to allow the tube to stretch itself on its bed, as our readers are doubtless accustomed to do on theirs. The principal phenomena of expansion and contraction in these tubes are two. The first is chiefly in the length, which varies in a summer day some inch and a-half for each tube covering a single opening, and between summer and winter varies about three and a-half inches. The other is a change in form, arising from the fact that the upper floor of the tube is exposed to the sun's rays, while the lower one is in the shade. The consequence is a greater lengthening of the upper than of the under plates, and a certain flexture of the tube. Such changes, if operating on a mass of iron about two miles long, would be, of course, very difficult to manage. The mode of providing against its inconveniences, therefore, is to divide the whole length of the roadway into thirteen tubes,—one over the large central arch 330 feet long, and six on each side of it, each formed of two tubes, and each covering two of the smaller openings or spans of 220 feet. The two tubes thus made into one, therefore, rest upon three piers, across one and resting by the two ends on two others. The united tube is firmly bolted down to the pier, which supports it in the middle: but the ends rest upon rollers, so that when they are prolonged by expansion the movement takes place without any resistance. The ends of the tubes at the piers where they rest on rollers, are of course, not in contact. There is a space of about a foot between them for any play arising from the cause already described.

The weight of iron in the tube, over each of the smaller openings, is 300 tuns, and over the larger one 900 tuns. Thus the weight of iron in the bridge will be about 81,000 tuns.

The progress made in laying the tubes this year has been considerable. Four spans are already covered—two on each side—and from this time to the end of the working season, it is expected that two more will be completed each fortnight, making twelve before the setting in of the Winter. The setting in of the severe season of our Canadian year will of course retard such a work, but will not entirely stop it, and tube laying will be continued in spite of frost, and wind, and rain and snow. Before leaving the tubes we saw a steam-riviting machine which, though it cannot accomplish all the work in that line owing to the difficulty in moving it, fastens a great many plates before they are put up in their places. It consists of a large steam cylinder having, a piston on the projecting end of which, are a number of dies in the shapes of rivet heads. The plates, with the rivet placed in the proper holes, being then presented to these dies the steam is allowed to enter the cylinder, and at once forces the dies against the rivets till they are pushed through the holes and clinched.

Descending from the upper works of the bridge, we next took boat for the piers. Of these there are seven completed on each side; two are rapidly approaching completion, and two are just on the point of being begun. It is expected that, unless some unforeseen event takes place, all the piers but one will be finished during the present year, or at least advanced so far as to permit of the work proceeding during the Winter. At piers No. 10 and 17, we witnessed all the processes employed, from the commencement of the day to the laying of the masonry. Of course the first thing to be done is to make a puddled dam round the place intended for the foundation of the pier, from the interior of which the water is to be pumped out, so that the masons may proceed with the foundations. The making and maintenance of the dam is, therefore, the chief difficulty of the engineer. The piles are driven into the ordinary bottom of the river; but the foundation of the stone work is several feet below, and the consequence is that the excavation required often destroys the foundation of the dam, and breaches constantly occur—all the more easily for the great depth and rapidity of the current. In order to lessen as much as possible the risks of these casualties, the line of bottom on which the dam is placed is rendered as even as possible by working a gravel scoop. This machine, however, constantly comes in contact with boulders and stones of various dimensions, and these have to be raised. For this purpose a diver is always employed, who descends upon the rock to be lifted, and holds the ram by which a hole for the "lewis" is made. This effected, the impediment is raised by a crane. These stones are of very different geological formations, and have evidently traveled very far from their present site, on the icy embarkations by which they were lifted from their original (what was their original?) resting place. We saw one of twenty tuns weight which had been brought up from as many feet below the surface of the river. Occasionally the break in the dam exhibits strange freaks. The water will sometimes rise up like a fountain in the center of the space marked out for the foundation, and it will require many hours of research to find the weak spot whence it has entered. The enemy, however, has to be traced, and, once found, the ingenuity and patience of the engineer soon conquers. Speed is a matter of considerable importance in the construction of works subject to so many accidents as piers built within dams. Hence, the workmen are employed in gangs, night and day, the light being afforded by a lamp with an immense reflector. The stones for the piers have been supplied from the quarries belonging to the Grand Trunk Company at Point Claire and from another quarry on the Richelieu. The stone from the latter is brought down by the St. Lawrence and Champlain Railway. We have to thank Mr. Hodges, the Chief Superintendent of the works for the contractors, and his able lieutenant, Mr. Aikman, for the kindness with which they afforded us all the explanations necessary to enable us to understand the works which we saw going on. They are entitled to congratulations on the success with which they have begun and prosecuted their arduous labors, in a climate and on a river presenting so many difficulties. They expect to finish the entire work with the end of the year 1859, and they will then have erected perhaps the most remarkable specimen of positive architecture which the world has yet seen.

IRON MOUNTAIN.

From The St. Louis Republican.

The Iron Mountain of Missouri is probably one of the greatest natural curiosities on the surface of our globe. Think of a mammillary formed mound or mountain of iron three miles in circumference, rising in the form of a cone or pyramid, three hundred feet high above the surrounding valleys—a great mass of the richest specular iron known, wedged in between a country formed of magnesian limestone on the one side, and porphyritic granite on the other. Where did this great mountain of iron come from? was it formed in the iron age of our globe? and when did the iron age have its commencement and end? Let us take the lights that the science of the rocks has revealed, and go back with the geologists in the early ages of the Iron Mountain region. Geologists say that the rock on the west side of the mountain belongs to the lower silurian limestone era. The boring of Belcher's Artesian Well, tells us that this same bed of rock which forms the surface of the country on the west side of the mountain, is in the well 2,000 feet below the bed of the Mississippi River, a dip of 2,800 feet from the mountain to St. Louis. Geologists say that this dip was necessary to form the great basins which contain coal in the central part of Illinois. On the east side of the mountain a granite country is found. Is this granite older or newer than limestone? and is the mountain of the same age as the granite? These are questions that present themselves in the study of this great Iron Center. The Iron Mountain is the period or terminus of what is known as the Ozark Mountains, a range of granite ridges and table lands that reach through Missouri, Arkansas and the Indian country to the Rocky Mountains. One fact may be kept in view in the study of the age of the Iron Mountain. It is found that all the developments in the vegetable or mineral kingdoms on our globe have been corresponding to the wants of animal organisms that existed at the same era. In the time of the mastodon and huge saurian dynasties, the vegetation was of a corresponding gigantic growth, the atmosphere was also suited to that class of animal life. Reasoning from this analogy, we might conclude that the Iron Mountain was formed at a comparatively recent geological epoch, as it was evidently formed to supply with iron the wants of the present race of man, and there was no necessity for its existence until man was in a position to use it. Let us go back to the age of our globe when commenced the era of the silurian system of rocks. The district where now stands the Iron Mountain was at that period a tabular mass of stratified rocks in the bed of an ancient ocean. No valley, ridge or mountain had yet come into existence. The beautiful system of physical geography, the abrasion of valleys in the solid rock, the fountain from which now break out a thousand springs in this iron-district, were yet in embryo. But this tabular mass of rock in the bed of this ocean is not always to remain in repose. The elevating and abrading forces, the great working-laws of nature are to act. This region of country is placed under their influence—and silently and quietly, stratified rocks are raised, granite ridges come to-day above the surface of this ocean. Meteoric forces, connected with the sun and every planet in our solar system are in action—we might say that electricity and its active partner, magnetism, are prime agents—age after age rolls round. The Devonian system of rocks is formed. The wonderful era of the formation of the coal bearing rocks and the growth of the vegetation entombed in our coal fields has its comment and end, following this comes the tertiary era with its mastodons and huge saurian monsters—after them the aborigines and then the present race of man. Let us look again. The horizontal table of rock of the silurian era in the bed of that ancient ocean is now the Iron Mountain region modeled by the great working laws of Nature to one of the most interesting mineral centers on the surface of our globe. The task of the geologist for coming ages will be to trace out by observation the changes through which this country has passed, and map out and mark down in each era spoken of, the changes of the Iron Mountain from the silurian era down to the present time.

POLITICAL.

MINNESOTA.—The attempt of the bogus Democrats in the Minnesota Legislature to force an election of a United States Senator in the place of Gen. Shields, at this session, was defeated in the lower House on Tuesday of last week. Gen. Shields's term does not expire till a year from the 4th of next March, and the only motive the Democrats can have to elect his successor *now* is, the very reasonable fear that the Republicans will have a majority in the next Legislature, and thus send to the Federal Senate a good Republican.

ILLINOIS.—The Hon. Elihu B. Washburne has been nominated for reelection to Congress by the Republicans of the Ist. (Galena) District, receiving on the first regular ballot of the Nominating Convention 58 votes to 33 for Mr. Ferry. The Douglas Democrats of the VIIth. (Egyptian) have nominated James C. Robinson. Aaron Shaw, the present member, was not a candidate for reelection. The Republican candidate is Mr. R. J. Oglesby, and P. B. Shepard is the candidate of the Administration.

OHIO.—The Republicans of the IVth Congressional District have nominated the Hon. M. H. Nichols for reelection.

KANSAS.—*The Leavenworth Times* of the 9th inst. gives the following as the result of the election on Lecompton Jr., as far as heard from:

Proposition rejected	7,910
Proposition accepted	1,432
Free-State majority	6,478

We have returns, says *The Times*, of seven counties entire, and portions of six counties. There are 36 counties in the Territory. All right! Our majority will increase every mail.

The same paper has the following:

"OXFORD.—Glorious Oxford! Like Kickapoo it boasted a vote, in other days, of thousands. Now—only think of it! Now, mighty Oxford—gigantic Oxford, polls only—29 votes all told! Nor is this all. It has only *three* Pro-Slavery majority! Where are the Border Ruffians? Where, oh! where the unseen, *spiritual* friends of Oxford and Kickapoo?"

FREE SUFFRAGE CONVENTION.

Whereas, A State Society was formed in the City of Troy, Sept. 5, 1855, known as the Free Suffrage Association of the State of New-York;

And *whereas*, The constitution of the said society declares that there shall be an annual meeting held in every September, by the order and direction of the President and Board of Managers of said Society, who shall be elected annually for the ensuing year, and all officers for the ensuing year;

Therefore I, William J. Hodges, President of said Society, with the advice and consent of the Board of Managers of said Society, do order and decree that there shall be a State Convention of the colored men of the State of New-York held in the City of Troy, on Tuesday, the 14th day of September, 1858, at 10 o'clock a. m. to appoint or elect officers for the ensuing year, and to do such other business as that body may determine.

And we do further order and recommend to all cities, villages, towns, neighborhoods, churches and societies of colored men in this State to call public meetings, and then and there elect or appoint such suitable delegates to represent them in the State Convention, in the City of Troy, according to the above notice.

Will *Frederick Douglass's Paper* and all other papers friendly to Freedom and Free Suffrage please insert this in their columns, and they will oblige. WILLIAM J. HODGES, President.

PETER H. MILLER, Secretary

On Thursday morning the inquest on the body of Sarah Ann Sennott, who was supposed to have been killed by her husband, was concluded. The Jury, after five minutes' deliberation, returned a verdict of "manslaughter" against Patterson, who has been committed to stand his trial at the next term of the Court of Queen's Bench. [Montreal paper.

LETTERS FROM THE PEOPLE

THE CONNECTICUT BOUNDARY DISPUTE.

To the Editor of The N. Y. Tribune.

SIR: A letter in THE TRIBUNE, Aug 6, from Mr. Julius B. Curtiss, a member, I believe, of the last Connecticut Legislature, purporting to reply to my communication published July 17, is, in great part, taken up with quotations from the reports of the New-York Commissioners, showing that for a distance of about thirty miles from Long Island Sound, boundary lines had been substantially ascertained. Quotation from any other document would have been equally pertinent to the questions at issue; for the assertion put forth by the Connecticut Legislature that a boundary line had been run, and afterward repudiated by the New-York Commissioners, was understood to relate solely to the *northern* section of the dividing line, which alone is in any serious dispute. My denial that any such line had been run, certainly referred to that part of the line only. If, however, the Legislature meant to say that a boundary line had been run the entire distance between the States, the assertion is equally untrue, and my denial is not invalidated in the least by the acknowledgement that such lines had been traced a part of the way.

Concerning the only section of the boundary really in controversy, Mr. C. argues that the straight line laid down from end to end of the section by the Engineer could not have been an "experimental" line, as I called it, because it was ascertained by means of a prior random line, and *therefore* must have been fixed as a boundary. This novel doctrine in engineering needs no refutation; but I would like to know how, in this case, Mr. C. disposes of the traditionary, or, as we claim, the true boundary line, which was also marked at the same time, in the same manner, and by the same means as the straight line. Were two boundaries then established? The duty of the Engineer was to furnish the Commissioners with such information as surveys would afford for their guidance in determining the true location of the dividing line; but he could himself no more establish a boundary than organize a new State. The only Commissioner present upon the survey of the line referred to was so well satisfied that the boundary was never straight, that his first communication to his colleagues or to the Connecticut Commissioners after that survey was begun was to the effect that further examination would be requisite. From that time to this, no Commissioner from New-York has ever admitted or pretended that the straight line ever was or could have been fixed as the boundary by any authority whatsoever. They certainly had the best opportunity of knowing their own opinions. How then shall be characterized Mr. C.'s statement "That it was not "until after the disbanding of the surveying party "that the Commissioners of New York made the important discovery that the Joint Commission had "exceeded its powers"? Is the charge that the New York Commissioners agreed to a line which they afterward repudiated any better than a libel?

In reply to my denial that any meeting was held for a settlement of the joint accounts, Mr. C. shows that the New-York Commissioners urgently desired such a settlement, and especially at a certain meeting with their Connecticut associates. Yes, they did by every means in their power endeavor to procure such a settlement, but *it was never granted*. The meeting alluded to was held for other purposes, and the Connecticut men refused utterly to allow any discussion or allusion to pecuniary affairs. Concerning it, they reported to their Legislature that the New-York Commissioners then "made a demand having no bearing "whatever upon the jurisdictional line which we de "clined to entertain until the work was finished."

Mr. Curtiss also con uses this oft-repeated request of an examination of the joint accounts, with a demand of an equal division of the engineer's compensation, and says it was made a condition to the settlement of the boundary. This is a great mistake. The New-York Commissioners never were accorded an opportunity either to insist upon such a division or to inform the Connecticut men upon what terms they were willing to adjust the joint expense, because as the report of the Connecticut Commissioners themselves shows, they refused to entertain the subject at all until monuments should have been set upon the line where they were determined to have it established. True, the Engineer had performed all the operations which Mr. Curtiss styles the work of "the joint commission," and it was reasonable to suppose that his compensation was a "joint expense;" but this is the only reason for all that has been said in Connecticut about the unfair demands of the New-York Commissioners respecting the Engineer's pay. No such demands were ever made. There never was a chance to make them. Even the demand of an examination was never made as a condition to anything. Mr. C. says "that a demand was made for a settlement of "accounts *independent of all other considerations*, as "one of the conditions of a settlement of the boundary "question." The clause in italics is quoted from the New-York Commissioners, and should have been so marked. The contradictory clause following it is his own.

The assertion that it is in consequence of disagreements respecting the joint expense of the survey that no line has been established, finds no support in any of the records or correspondence of the Commission ers, unless the utter refusal of the Connecticut Commissioners to consider any subject connected with those expenses until after the adoption of an impossible line, and their puerile attempt in that way to extort an improper settlement can be called such a disagreement.

There were other topics introduced in my former communication.

I charged the Connecticut Legislature with having published that the New-York Commissioners had not within the past year requested the Connecticut Commissioners to proceed to the settlement of the line, notwithstanding the fact that such requests had repeatedly been made.

I charged that while the State of Connecticut upheld its Commissioners in refusing to establish the boundary where it has always been located, no lawyer or public man of that State would seriously claim that any other location was either legal or just.

I charged and still charge the State of Connecticut with owing a portion of its just share of the joint expenses already incurred, beyond all contingency of dispute, which debt it consents neither to pay, acknowledge nor investigate. There are now on file at Albany vouchers for personal expenses of the Connecticut Commissioners, paid out of the New-York State Treasury, and two separate Legislatures of Connecticut have been cognizant of that fact, but have approved of the refusal to settle these and other bills.

I charged the State of Connecticut with upholding its Commissioners in an utter disregard and neglect of the reasonable requests and courteous communications of the New York Commissioners, and with misstating to the world the cause of the difficulty between the States.

To none of these charges Mr. Curtiss, conversant with the facts, makes any allusion!

But, says Mr. C., the Committee designed "to pre- "vent a quarrel between Commissioners from becom- "ing a quarrel between the States." Too late, Sir. There is no quarrel between Commissioners. There has been none for many months. It takes two parties to quarrel. When the New-York Commissioners, in January, 1857, refused to be drawn into the discussion of any "personal or irrelevant matters," the Connecticut Commissioners refused to discuss any matters at all. Since that time there has been nothing but request, proposition and solicitation on our side, and perfect silence and inaction on theirs. So long as the Connecticut Commissioners had a legal existence, no newspaper communication on this subject eminated from any member of the New-York Commission, to my knowledge. Of the character of their official communications let candid men judge from the documents themselves. But now the State of Connecticut has assumed the responsibility of its late Commissioners' acts. *My* "quarrel" is with the State, and I claim the right to call upon it to correct its false record. The question now for that State is whether it shall act candidly and justly—not whether the New-York Commissioners have or have not been inconsistent in their action. When by its acts it shall have proved them unwarranted, I will gladly apologize for any "flings" I have "indulged in," impugning its magnanimity. For the present, I have this suggestion to make: It is worse to be mean than to be charged with meanness. Of the New-York Commissioners two at least would have long ago resigned their thankless office had they not been advised by those in authority that to resign would be to desert a post of duty and to abandon rights which they were bound to defend. The abrogation by Connecticut of the compact under which they acted virtually releases them from their disagreeable position. But since Mr. Curtiss seeks to hold them responsible for the failure to settle the dispute, will he say that they could, at any time, have effected even a pretended settlement except by consenting to a boundary where none had ever been before, transferring lands and people from New-York to Connecticut? Will he say that such a line would have been proper for them to agree to?

Since he charges a disagreement upon pecuniary matters as the reason of all the trouble, will he say that they ever had an opportunity to participate in an agreement upon these matters, on *any terms whatever*, unless they should first have consented to this supposed boundary?

Will he deny that propositions for settlement have repeatedly been made by them, which have remained for eighteen months unnoticed and unreplied to?

Will he say that those propositions, as published in the New-York reports, contained anything which he, had he been sole Commissioner for Connecticut, would have considered unfair or disrespectful, or which he would not have been willing to accede to?

Will he say that those propositions did not meet all the most essential points of a proper settlement of the whole controversy?

"To the law and to the testimony"

Wall st., Aug. 9, 1858. SAMUEL D. BACKUS.

HIGH WATER OF THE LAKES.

THE CAUSES OF THE DIFFERENCE OF LEVEL.

To the Editor of The N. Y. Tribune.

SIR: I read in THE TRIBUNE the paper by Mr. Allen of Black Rock on this subject with much interest. I was happy to find in it more good sense and discrimination than always appears on this topic, instead of the guesses, suppositions and imaginings which often abound. Long since I learned on such subjects to rely alone on actual measures—reliable statistics.

The constant statement has been for weeks that *Lake Ontario is unusually high*, or about two feet higher than had been known, as some said, by the "oldest inhabitants," man or fish. This last I knew to be false by a certain well known mark. But, as the Lake might still be higher than usual, I went to the light-house at the mouth of the Genesee, whose keeper is required by Government to record the regular monthly variations of the level of the lake. He turned to the record, and the lake is *seven inches higher than in October*, 1857, the highest before known in eleven years.

The measures have been regularly taken, and for the eleven years past I have published them. The conclusions derived from them and from meteorological observations are, that the fluctuations of the level depend on the quantity of water poured into the lakes by all the streams which carry off the rain and the melted snow, and upon the amount of evaporation. These are adequate causes, and these are at least great facts.

There is no regular time of rise or fall in the lakes, no periodical changes of five, or seven, or eleven years.

Lake Ontario is high or low when or soon after the same fact in Lake Erie, and the fluctuations are about equal, as they are in Lake Michigan. Col. Whittlesey's measures of Lake Erie have been compared with those of Lake Ontario, all high or low water. The obvious effect of high winds continued are no authority in either case.

That you and your readers may have the facts, the following table is given. The difference in the level is very rarely four feet in a year, when the waters are at rest.

The measures are taken from a fixed point or mark downward; when the lake is lower the measure is greater, and when higher the measure is less. The table contains the highest and lowest in a year, the month and the measure:

	Lake highest.	ft.	in.	Lake lowest.	ft.	in.
1846	June and July	2	3	February	3	[illegible]
1847	June, July and Aug.	1	1	January	3	[illegible]
1848	January	1	5	November	3	[illegible]
1849	June	1	9	March	3	[illegible]
1850	June	1	5	November	3	[illegible]
1851	July	1	11	February	3	6
1852	October	0	11	February	3	[illegible]
1853	June	0	2	December	3	[illegible]
1854	June	1	0	December	3	2
1855	December	1	7	February	3	5
1856	June	0	6	Nov. and Dec.	3	[illegible]
1857	October	0	8	February	3	[illegible]
1858	August	0	10	March	3	[illegible]

In 1858, to August, the variation of level is 1 ft. 6 in.; in 1857, 3 ft. 11 in.; in 1846, 1 ft. 3 in.; in 1847, 1 ft. 11 in.; in 1848, 2 ft. 1 in., and so on.

There is no regular period of rise and fall. The highest is sometimes in January or December, but commonly in the Summer months; the lowest in the colder months. The range in the table is 4 ft. 6 in.; the lowest in February, 1857, 3 ft. 8 in., and the highest in August, 1858, 0 ft. 10 in.

The high water of December, 1857, and the large fall of rain, led me to publish last January, the probability of continued high water, and the great rains of the West, and of Ohio and New-York, have continued the rise, and increased it to the present time.

As I wrote at once to Mr. Allen the true height of Lake Ontario, he desired me to make the correction and send to you for publication.

If Lake Erie is two feet higher than last year, Lake Ontario will rise still higher, so free is the discharge from the former by Niagara River into the latter.

The Lakes seem to be under very singular laws, a discovery very difficult of reception and belief by multitudes.

C. DEWEY.

University of Rochester, Aug. 11, 1858.

PECUNIARY DISTRESS AT THE WEST.

To the Editor of The N. Y. Tribune.

SIR: Having for a long time been a subscriber and reader of THE TRIBUNE, I have come to consider it as a true friend, whose arrival I always expect with a certain anxiety, and whose counsels I usually accept and follow. This being the case, you will not think it strange that I should now wish to ask your advice, and perhaps assistance, in a matter of considerable importance to myself and others; and *I rely upon* your kind indulgence to forgive the *trouble I hereby* may cause you.

I came here to New-York a few days ago, principally for the purpose to ascertain whether or not it would be possible to find some capitalists who would loan money on long time—say three to five years—and reasonable interest, and take in security good improved real estate in Northern Iowa and Southern Minnesota. I reside in Iowa, near the Minnesota line, in St. Ansgar, Mitchell County, one of the many young, flourishing towns in the beautiful Cedar Valley; and I can say with truth that this portion of Iowa and Minnesota is not surpassed in healthfulness, fertility and beauty. In a few years, the whole country has turned from a wilderness into rapidly-growing settlements, villages and cities, and the times were so that none were afraid to expend all their means in improving their property, sure that they would soon have railroad communications with the North, East and South, and good markets for their surplus produce. Farmers thought it no speculation, but simply good, thrifty policy, to extend their improvements as much as possible, so as to be prepared for the still better times so confidently expected. But the crash came, without any warning whistle! The merchants were called upon for money—they again called upon the farmers, and so on. What little money there was left after the public land sales had gone East, and still the merchants and farmers were not out of debt. The black cloud of commercial distress and distrust enveloped our portion of the country with the remainder, and, at least temporarily, darkened our splendid prospects for the future.

So things have gone on. There is scarcely any money left in our portion of the country, and it is of very little benefit to a man to have ever so much to sell if he *must* have money, for money he cannot get, unless perhaps he will sell for one-third or one-fourth the value of the article. There are a few who loan money on 60 or 90 days, and for 40 up to 100 per cent., on first-rate security; but if people shrink from borrowing money on such terms—and well may they shrink from it!—then there is only one alternative, to let their property be sold at public sale for what it may bring; and that will, in money, frequently be not over one-tenth of its real value.

Now, we saw in THE TRIBUNE, and other Eastern papers, every week, that there was money enough here in New-York, and that the rates of interest here were generally very low. It is true, that we also read about the general distrust here in regard to Western securities; but we thought that it might after all be possible, if tried, to get some capitalists to come out, or to send out agents, to examine the property we would give in security for the loans we might obtain; and we could not for a moment doubt but that they would be perfectly satisfied with the security, as soon as they really examined it, for it is only small loans the farmers need and want to carry them through till better times; and it is but in a very few instances, if ever, that a farmer would willingly sell his hard-won home for ten times the amount he may wish to borrow on it. And so it was concluded that I should come down here and try what could be done. I had some letters of introduction to gentlemen in Wall street. They each and all received me very kindly, assured me of their warmest wishes of success to my endeavors, and said that they would gladly assist me all they could, &c., but they generally ended by saying that they must tell me as their candid opinion, that *nothing could be done*, principally on account of the instability of our Western laws and securities, and also on account of the many gross frauds committed by some of the Western Railroad Companies and others, whereby Eastern creditors have greatly suffered.

I am very far from doubting the correctness of these statements, and can well understand and even sympathize with the feeling of distrust peculiar to the times, and I should probably have given up all hope of success and gone home, without further troubling myself or others in this matter, if I had not gradually come to the conviction that the aforesaid distrust is carried too far, even to the verge of injustice. It is carried too far, when whole classes who are perfectly innocent of any fraud—e. g., the farmers generally—are involved in the general suspicion, and made to suffer for the frauds and rascalities committed by comparatively a very few scoundrels; and let it be remarked that while those few can scarcely ever be reached, and care but little about the distrust they have occasioned, it is on the laboring classes, the farmers, mechanics and country merchants, this distrust, with all its bitter consequences, falls with the most crushing severity. Neither is the sweeping charge against Western securities quite just. The security farmers offer, by mortgaging their homesteads for comparatively small amounts of money, would be considered unexceptionable, if viewed with a little